## Message

From: Christopher Mebane [cmebane@usgs.gov]

**Sent**: 8/30/2013 5:37:43 PM

To: Macchio, Lisa [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=e7a9f87246cd422d9bdace2cdf1abbef-Macchio, Lisa]

CC: Don.Essig@deq.idaho.gov [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=4e58ee293a6743a68d71e165f7838db1-Don.Essig@deq.idaho.gov];

Lehmann, Wade [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=e5dd685dec4643478e64efb18c1b1429-Lehmann, Wade]

Subject: RE: Oregon NOAA BiOp

Lisa, during the internal reviews, when reviewing the magnitude of projected effects with selenium to that of other substances, it seemed a J/AM conclusion with RPAs best followed from the analysis and would be the finding that was most internally consistent with findings for other substances with comparable projected magnitudes of effects.

The conclusions in biological opinions are ultimately qualitative, judgment calls. At present there are no quantitative, bright lines available to direct a "non-jeopardy/non-adverse modification of critical habitat" finding versus a J/AM finding. (There have been suggestions to use quantitative rules, such as <x% reductions in lambda, increasing the 100-yr population extinction risk by <10% or whatever, but these ideas never got traction for a lot of reasons.)

I did see the Oregon BiOp and noticed differences in emphasis in the evaluations: in Oregon, the direct effects of selenium in water-column exposures were emphasized, whereas in the Idaho dBO, trophic-transfer was emphasized. I did not have direct involvement in the Oregon evaluation and thus am not in a position to explain the analyses, differences in what scientific information was readily available, etc.. For more information on the NOAA Oregon BiOp, the point of contact is Robert Anderson, (503) 231-2226. I would be happy, however, to go through the Idaho analysis on Wednesday's call.

Chris

From: Macchio, Lisa [mailto:Macchio.Lisa@epa.gov]

**Sent:** Thursday, August 29, 2013 17:58

To: <a href="mailto:cmebane@usgs.gov">cmebane@usgs.gov</a>

Cc: Don.Essig@deq.idaho.gov; Lehmann, Wade

Subject: Oregon NOAA BiOp

I took a look through the Oregon NOAA BiOp and did not find any RPA's related to selenium, however the text seems to indicate there are effects from selenium. It would be helpful is you or someone who knows this BiOp could explain this so that I can better understand the differences between the Oregon BiOp and the draft Idaho BiOp. Thanks. Maybe we should add a discussion of this to next Wednesday's conference call??